

**WHAT IS CLAIMED IS:**

1. A stock preparation monitoring system, comprising:

a stock preparation apparatus;

a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a wireless transmitter for transmitting an air-borne wireless output signal corresponding to said sensed physical parameter;

a remote unit including a receiver for receiving said wireless output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said wireless output signal; and

a base unit including a second data link at least intermittently coupled with said first data link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

2. The stock preparation system of claim 1, wherein said stock preparation apparatus includes a wear part, and wherein said wireless output signal corresponds to a wear state of said wear part.

3. The stock preparation system of claim 2, wherein said stock preparation apparatus comprises a screen basket and said wear part comprises a screen within said screen basket.

4. The stock preparation system of claim 3, wherein said screen includes a plurality of holes and said wireless output signal generally corresponds to a profile of said holes.

5. The stock preparation system of claim 4, wherein said sensor comprises an ultrasound transceiver.

6. The stock preparation system of claim 5, wherein said wireless output signal generally corresponds to a size of said holes.

7. The stock preparation system of claim 1, said remote unit including means for at least one of:

analyzing said wireless output signal; and

transmitting a state notification to said base unit via said first data link and said second data link corresponding to a state of said sensed physical parameter.

8. The stock preparation system of claim 1, wherein said base unit includes means for each of said analyzing step and said transmitting steps.

9. The stock preparation system of claim 1, wherein said first data link and said second data link each comprise a modem.

10. A method of monitoring a stock preparation system, comprising the steps of:

providing a stock preparation apparatus;

coupling a sensor with said stock preparation apparatus;

sensing a physical parameter associated with said stock preparation apparatus;

transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

10 at least one of:

analyzing said remote output signal;

transmitting a state notification via said second data link and said first data link corresponding to a state of said sensed physical parameter;

15 transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

11. The method of claim 10, wherein said analyzing step is carried out in said base unit.

12. The method of claim 10, wherein said analyzing step is carried out in said remote unit.

13. The method of claim 10, wherein said step of transmitting said state notification comprises transmitting said state notification to said remote unit from said base unit.

14. The method of claim 10, wherein said steps of transmitting said price quote and transmitting said shipment notification are each carried out in said base unit.

15. The method of claim 10, wherein said first data link and said second data link each comprise a modem and said step of transmitting said remote output signal is carried out intermittently.

16. The method of claim 10, wherein said analyzing step is carried out after said step of transmitting said remote output signal.

17. A method of monitoring a physical parameter of a wear part in a system for one of making and processing a fiber suspension, comprising the steps of:

positioning a sensor in association with the wear part;

sensing a physical parameter associated with the wear part;

5 transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

10 at least one of:

analyzing said remote output signal;

transmitting a state notification corresponding to a state of said sensed physical parameter;

transmitting a price quote; and

15 transmitting a shipment notification.

18. The method of claim 17, wherein said system comprises one of a stock preparation system and a paper-making machine.

19. A stock preparation monitoring system, comprising:

a stock preparation apparatus;

5 a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a transmitter for transmitting an output signal corresponding to said sensed physical parameter;

a remote unit including a receiver for receiving said output signal, said receiver including  
a first data link for transmitting a remote output signal corresponding to said output signal; and

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a base unit including a second data link at least intermittently coupled with said first data  
link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and  
said first data link corresponding to a state of said sensed physical parameter;

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transmitting a price quote to said remote unit via said second data link and said  
first data link; and

transmitting a shipment notification to said remote unit via said second data link  
and said first data link indicating a part has been shipped.

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